

# Toronto WES IW&SQ Branch

[Branch Overview](#)

[Resources](#)

[By-Law](#)

[Related Projects](#)

## Specific Issues

[Plumbing](#)

[Interferences](#)

[Mercury Trends](#)

## Next Steps

[Legal/Technical Issues](#)


[Enforcement](#)

[Challenges](#)

## *Toronto Works Industrial Waste Branch*

### By-Law Activities

- Sewer Use By-Law sampling & enforcement.
- Watershed monitoring
- Pollution Prevention (P2) planning

 previous

next 

<date>

# Toronto WES IW&SQ Branch

[Branch Overview](#)

[Resources](#)

[By-Law](#)

[Related Projects](#)

## Specific Issues

[Plumbing](#)

[Interferences](#)

[Mercury Trends](#)

## Next Steps

[Legal/Technical Issues](#)

[Enforcement](#)

[Challenges](#)

## Resources



# Toronto WES IW&SQ Branch

[Branch Overview](#)

[Resources](#)

[By-Law](#)

[Related Projects](#)

## Specific Issues

[Plumbing](#)

[Interferences](#)

[Mercury Trends](#)

## Next Steps

[Legal/Technical Issues](#)

[Enforcement](#)

[Challenges](#)

## *By-Law*

- Bylaw 457-2000 enacted June 2000 (Mun. Code c. 681)
- Hg limit reduced from 0.1 to 0.01 mg/L effective Nov. 2002 (delayed)
- Dentists must submit P2 plans by Dec 31/01
- Dentists must install amalgam traps by Jan. 1, 2002
- Dentists must update P2 plans every 2 years

# Toronto WES IW&SQ Branch

[Branch Overview](#)

[Resources](#)

[By-Law](#)

[Related Projects](#)

## Specific Issues

[Plumbing](#)

[Interferences](#)

[Mercury Trends](#)

## Next Steps

[Legal/Technical Issues](#)

[Enforcement](#)

[Challenges](#)

## *Related Projects*

City of Toronto has participated or assisted in the following projects related to mercury and dental amalgam

- Western Lake Superior Sanitary District (WLSSD - Duluth) mercury elimination project
- Environment Canada BMP development for Dental Wastes
- Evaluation of waste amalgam separators at City Public Health clinics (funded in part by Environment Canada)
- American Municipal Sewerage Agencies (AMSA) Workgroup Research Project
- Educational seminars at Ontario Dental Association annual meetings
- Toronto Public Health has installed DRNA MRU at all clinics

## Toronto WES IW&SQ Branch

[Branch Overview](#)

[Resources](#)

[By-Law](#)

[Related Projects](#)

## Specific Issues

[Plumbing](#)

[Interferences](#)

[Mercury Trends](#)

## Next Steps

[Legal/Technical Issues](#)

[Enforcement](#)

[Challenges](#)

## Plumbing

To meet by-law limits all amalgam-bearing streams must be connected to an advanced amalgam separator including

- suction (vacuum) apparatus
- cuspidor
- sinks
- any other drains receiving amalgam waste

Cuspidors may be eliminated or retrofitted with valves to accommodate.

The dental team may use best practices such as use of rubber dams to collect waste or eliminating use of sink as a cuspidor to ensure that amalgam waste is not disposed to plumbing appurtenances which are not serviced by the advanced waste amalgam separator.

[previous](#)

[next](#)

<date>

## Toronto WES IW&SQ Branch

[Branch Overview](#)

[Resources](#)

[By-Law](#)

[Related Projects](#)

## Specific Issues

[Plumbing](#)

[Interferences](#)

[Mercury Trends](#)

## Next Steps

[Legal/Technical Issues](#)

[Enforcement](#)

[Challenges](#)

## *Interferences*

Strong oxidizers, such as hypochlorite bleach, may react with amalgam particles in the waste amalgam separator to dissolve the mercury and reduce the efficiency of the separator



Maximum Separation Systems



DRNA MRU

[previous](#)

[next](#)

<date>

**Toronto WES  
IW&SQ Branch**

[Branch Overview](#)

[Resources](#)

[By-Law](#)

[Related Projects](#)

**Specific  
Issues**

[Plumbing](#)

[Interferences](#)

[Mercury Trends](#)

**Next Steps**

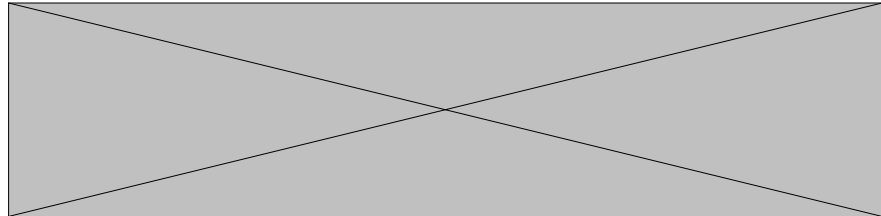
[Legal/Technical Issues](#)

[Enforcement](#)

[Challenges](#)

## *Mercury Trends*

### Concentration of Hg in Biosolids



2003 = Jan/Feb/Mar only

Estimated 1200 amalgam separators  
installed

[◀ previous](#) [next ▶](#)

<date>

## Toronto WES IW&SQ Branch

[Branch Overview](#)

[Resources](#)

[By-Law](#)

[Related Projects](#)

## Specific Issues

[Plumbing](#)

[Interferences](#)

[Mercury Trends](#)

## Next Steps

[Legal/Technical Issues](#)

[Enforcement](#)

[Challenges](#)

## *Legal/Technical Issues*

The City has developed a sampling protocol which has been forwarded to the Royal College of Dental Surgeons of Ontario (RCDSO) for comment.

RCDSO has a legal action pending against the City (judicial review) contesting the authority of the City to regulate dental practices.

The City intends to pursue its interests in protecting sewers.

The City is hiring and training new dedicated enforcement officers to be mobilized by summer 2003.



[previous](#)

[next](#)

<date>



## Toronto WES IW&SQ Branch

[Branch Overview](#)

[Resources](#)

[By-Law History](#)

[Projects](#)

### Specific Issues

[Plumbing](#)

[Interferences](#)

[Mercury Trends](#)

## Next Steps

[Legal/Technical Issues](#)

[Enforcement](#)

[Challenges](#)

## *Enforcement*

The City intends on inspecting and taking one sample from each dental practice in 2003.

Normal procedure is to issue one warning where there is a by-law violation (unless there is damage or an intentional violation whereupon charges may be laid.)

## Toronto WES IW&SQ Branch

[Branch Overview](#)

[Resources](#)

[By-Law](#)

[Projects](#)

## Specific Issues

[Plumbing](#)

[Interferences](#)

[Mercury Trends](#)

## Next Steps

[Legal/Technical Issues](#)

[Enforcement](#)

[Challenges](#)

## Challenges

- Obtaining representative samples
- Establishing sampling ports/taps
- Ready access to sampling location
- Preparing samples for analyses (partitioning in sample)
- RCDSO encouraging Ministry of Health to regulate and preclude “patchwork of municipal legislation”
- “Legacy amalgam” in plumbing